

SmartSwitch 9000
9C500 Plus Power Box
Installation Guide

Notice

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Rochester, NH 03867

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Order Number: 9031344-02

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FCC Notice

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment uses, generates, and can radiate radio frequency energy and if not installed in accordance with the operator's manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause interference in which case the user will be required to correct the interference at his own expense.

WARNING: Changes or modifications made to this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

VCCI Notice

This is a Class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective actions.

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Industry Canada Notice

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la class A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

Declaration of Conformity Addendum

Application of Council Directive(s): **89/336/EEC**

73/23/EEC

Manufacturer's Name: **Cabletron Systems, Inc.**

Manufacturer's Address: **35 Industrial Way**

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Conformance to Directive(s)/Product Standards: **EC Directive 89/336/EEC**

EC Directive 73/23/EEC

EN 55022

EN 50082-1

EN 60950

Equipment Type/Environment: **Networking Equipment, for use in a**

Commercial or Light

Industrial Environment.

We the undersigned, hereby declare, under our sole responsibility, that the equipment packaged with this notice conforms to the above directives.

Mr. Ronald Fotino

Full Name

Principal Compliance Engineer

Title

Rochester, NH, USA

Location

Mr. J. Solari

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Managing Director - E.M.E.A.

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Installing the 9C500 Plus Power Box

The 9C500 Plus Power Box (power box) is installed in a standard 19 inch equipment rack near the SmartSwitch 9000 9C114 Chassis (chassis) only after two power supplies (9C214-1 AC or 9C214-2 DC) have been attached directly to the chassis.

Power supplies are added to ensure adequate power for the modules installed, or to achieve power redundancy. Two power supplies can be added per power box, and two power boxes can be installed per chassis. An auxiliary power cord connects the power box to the chassis.

This guide contains the information necessary to: install a power box(es) in a standard 19 inch equipment rack, connect the auxiliary power cord to the power box, attach terminator block (if necessary), install power supplies in the power box(es), replace a power supply or an auxiliary power cord.

For detailed operational information on other SmartSwitch 9000 components, refer to the following manuals:

SmartSwitch 9000 Installation Guide

SmartSwitch 9000 Operations Guide

SmartSwitch 9000 9C300-1 Environmental Module User's Guide

SmartSwitch 9000 9C214-1 AC Power Supply Installation Guide

SmartSwitch 9000 9C214-2 DC Power Supply Installation Guide

SmartSwitch 9000 Module Local Management User's Guide

INB Terminator Modules Installation Guide

Getting Help

For additional support related to this device or document, contact Cabletron Systems using one of the following methods:

World Wide Web	http://www.cabletron.com/
Phone	(603) 332-9400
Internet mail	support@cabletron.com
FTP	ftp://ftp.cabletron.com/
Login	<i>anonymous</i>
Password	<i>your email address</i>
To send comments or suggestions concerning this document, contact the Cabletron Systems Technical Writing Department via the following email address: TechWriting@cabletron.com <i>Make sure to include the document Part Number in the email message.</i>	

Before calling Cabletron Systems, have the following information ready:

- Your Cabletron Systems service contract number
- A description of the failure
- A description of any action(s) already taken to resolve the problem (e.g., changing mode switches, rebooting the unit, etc.)
- The serial and revision numbers of all involved Cabletron Systems products in the network
- A description of your network environment (layout, cable type, etc.)
- Network load and frame size at the time of trouble (if known)
- The device history (i.e., have you returned the device before, is this a recurring problem, etc.)
- Any previous Return Material Authorization (RMA) numbers

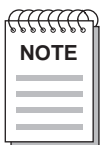
Installation

Install the power box and power supplies in the following order:

1. Install the power box in a standard 19 inch equipment rack.
2. Connect the auxiliary power cord from the power box to the chassis.
3. Attach the terminator (if only one power box is being added) to the chassis.
4. Install the power supplies in the power box.

5. Ensure the power supply wiring is routed away from sharp edges.
6. Power up the power supplies.

Installing the Power Box



If you are installing more than one power box in an equipment rack, to prevent tipping, the SmartSwitch 9000 Chassis should be moved to the bottom of the rack before installing the power boxes; or the rack should be secured to the floor.

Complete the installation of the first power box by following the steps below:

1. Remove the unit from the shipping box. (Save the shipping box and packing materials in the event the power box must be reshipped.)
2. Remove the unit from the plastic bag and check for damage. If any damage exists, DO NOT attach the unit. Contact Cabletron Systems Technical Support immediately.
3. Remove the accessory package.
4. Line up the four holes in the frame of the power box with four corresponding holes on the equipment rack (take care to properly align the holes).
5. Secure the power box to the equipment rack using four bolts shipped with the equipment rack.

Connecting Auxiliary Power Cord

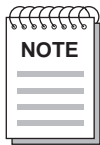
There are two auxiliary power source connectors on the back of the SmartSwitch 9000 Chassis. The power supply number that displays on the LCD of the 9C300-1 Environmental Module (EM) and local or remote management screens is a function of the connection made from the power box to one of these connectors.

If the connection is made to the right auxiliary power source connector (Figure 1-1), the power supply in the right side of the power box is number 3 and the power supply in the left side is number 4.

If the connection is made to the left auxiliary power source connector (Figure 1-1), the power supply in the right side of the power box is number 5 and the power supply in the left side is number 6.

Using the auxiliary power cord, accessories supplied with the power box, and referring to Figure 1-1, connect the auxiliary power cord from the power box to the auxiliary power source connector on the back of the chassis by following the steps below:

1. Loosen and remove the two screws from the right auxiliary power source connector cover (looking from the back of the equipment rack to the front) on the rear of the chassis.
2. Remove the connector cover. (Keep the cover in the event you need to remove the power box connection. The cover must be replaced to protect the connector.)
3. Plug one end of the auxiliary power cord into the connection on the power box and secure the connection by tightening the thumb screws.
4. Secure the plug to the power box by inserting the captive screw attached to the bracket on the power cord in the hole in front of the power cord connection on the power box and tightening the screw.



If standoff connectors have not been built on the back of the SmartSwitch 9000 Chassis above and below each auxiliary power source connector, the standoff connectors included with the auxiliary power cord accessory package must be screwed in the threaded holes above and below the auxiliary power source connector before completing Steps 5 and 6.

5. Plug the other end of the auxiliary power cord into the right auxiliary power source connector on the back of the chassis and secure the connection by tightening the thumb screws.
6. Secure the plug to the chassis by inserting the captive screw attached to the bracket on the power cord in the hole on the back of the chassis above and to the right of the auxiliary power cord connection and tightening the screw (Figure 1-1).

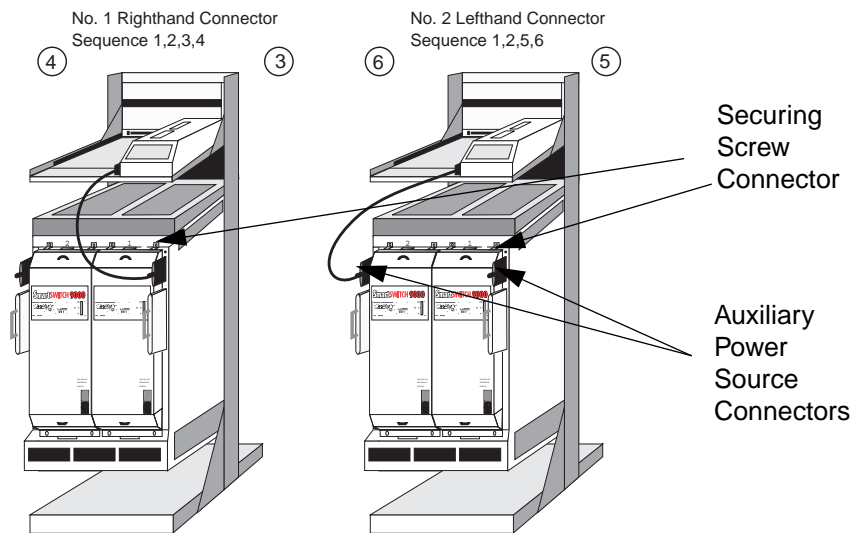
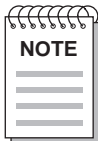


Figure 1-1. Connecting Auxiliary Power Cord

Attaching Terminator

If you are connecting only one power box to a chassis, the unused auxiliary power source connector on the rear of the chassis must be terminated. To complete the termination, use the terminator included in the auxiliary power cord accessory package and follow the steps below.

1. Loosen and remove the two screws from the unused auxiliary power source connector cover (Figure 1-1) on the rear of the chassis.
2. Remove the connector cover. (Keep the cover in the event you need to remove the terminator. The cover must be replaced to protect the connector.)



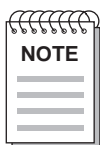
If standoff connectors have not been built on the back of the SmartSwitch 9000 Chassis above and below each auxiliary power source connector, the standoff connectors included with the auxiliary power cord accessory package must be screwed in the threaded holes above and below the auxiliary power source connector before completing Steps 3 and 4.

3. Line up the pins on the terminator with the corresponding connector holes and gently push the terminator in until the frame touches the chassis.
4. Secure the terminator to the chassis by tightening the built in thumb screws.

Installing Power Supplies

Two power supplies (either two 9C214-1 AC, or two 9C214-2 DC; but not one of each) can be installed in a power box. The power supplies installed in the power box must be identical to those attached to the back of the SmartSwitch 9000 Chassis. For example, if two 9C214-1 AC Power Supplies are attached to the SmartSwitch 9000 Chassis, only 9C214-1 AC Power Supplies can be installed in a power box. Power supplies are installed from the rear of the power box (looking from the back of the power box to the front refer to Figure 1-2). The first power supply is installed in the right side of the power box, the second is installed in the left side. Complete the installation by following the steps below:

1. Remove the power supply from the shipping box and slide the two foam end caps off the unit. (Save the shipping box and packing materials in the event the power supply must be reshipped.)
2. Remove the power supply from the protective bag.



9C214-1 AC Power Supplies installed in the power box must be revision code HC or above. 9C214-2 DC Power Supplies installed in the power box may be any revision code. Refer to the serial number on the SmartSwitch 9000 label on the power supply to determine the revision code for either type of power supply. The last three digits of the serial number represent the revision code.

3. Plug the power cord into the power socket on the lower right front corner of the 9C214-1 AC power supply, or connect the power cord to the terminal block on the 9C214-2 DC power supply.
4. Hold the power supply horizontally by the top and bottom handles, with the bottom of the power supply toward the front of the chassis.
5. Align the front of the power supply in the center of the two rails in the right side of the power box and slide the power supply toward the front of the equipment rack (Figure 1-2) until the tab on the power supply is inserted in the slot in the front of the power box.
6. Align the connector on the back of the power supply above the receptacle on the power box.
7. Push down on the power supply handles until the frame of the power supply touches the surface of the power box. Do not force the power supply into place. If significant resistance is encountered before the frame is flush with the power box, remove the power supply, realign it and push it down again.
8. Secure the power supply to the power box by tightening the two screws on the top of the power supply.
9. If you are installing more than one power supply, repeat steps 1-8.

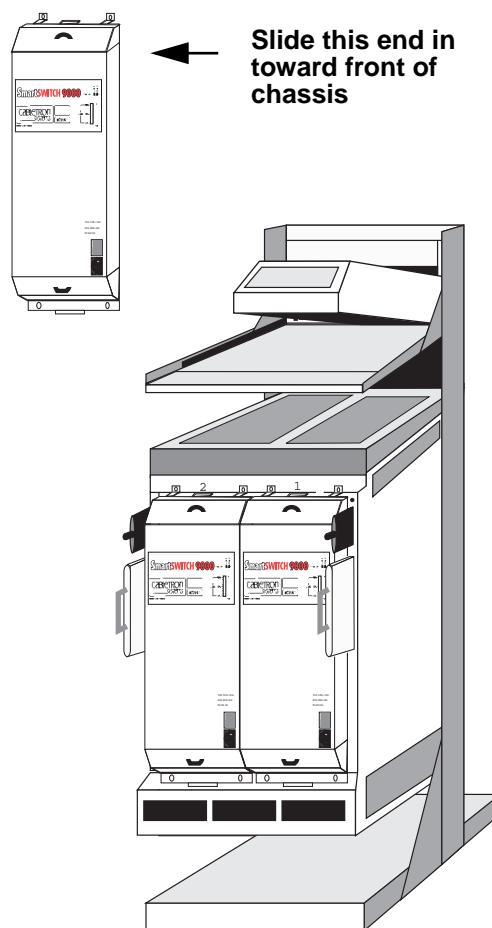


Figure 1-2. Installing Power Supply (Supplies)

Powering Up Power Supplies

If necessary, before performing the power up steps, refer to the SmartSwitch 9000 9C214-1 AC Power Supply Installation Guide or the SmartSwitch 9000 9C214-2 DC Power Supply Installation Guide for detailed information regarding connecting a power supply to the power source.

After installing the power supply(ies) (and attaching the terminator if necessary) power up the power supply(ies) by following the steps below:

1. Plug the power cord into the power source (AC receptacle or DC power source). Turn on the power supply using the switch located near the power cord. The power supply uses a soft start feature and does a pre-power diagnostic check. Outputs become enabled within five seconds of power on.

2. Check that the LEDs for SMB (system management bus) and PWR (power) are green.

If the LEDs are any color other than green, refer to the *SmartSwitch 9000 9C214-1 AC Power Supply Installation Guide* or the *SmartSwitch 9000 9C214-2 DC Power Supply Installation Guide*.

Replacing Power Supplies

If it becomes necessary to replace a power supply that has been installed in a power box, power (AC or DC) to the power supply must be interrupted before it is removed. Interrupt the power by turning off the power supply switch and/or disconnecting the AC or DC input power source. Remove the power supply by following the steps below:

1. Loosen the two screws on the top of the power supply.
2. Press down firmly on the ejector tab on the rear of the power box to unseat the power supply.
3. Grasp the top and bottom handles of the power supply, lift up and remove.
4. Replace the power supply by following the steps under Installing Power Supplies.

Replacing Auxiliary Power Cord

If it becomes necessary to replace an auxiliary power cord, power (AC or DC) to all power supplies installed in the power box connected to the chassis by the auxiliary power cord must be interrupted before removing the auxiliary power cord. Interrupt the power by turning off the power supply switches and/or disconnecting the AC or DC input power source. Replace the auxiliary power cord by following the steps under Connecting Auxiliary Power Cord.

Operating Specifications

Safety Specifications



It is the responsibility of the person who sells the system to ensure that the total system meets allowed limits of conducted and radiated emissions.

This equipment meets:

The safety requirements of:

- UL 1950
- CSA C22.2 No. 950
- EN 60950
- IEC 950

The EMI Requirements of:

- FCC Part 15 Class A
- EN 55022 Class A
- VCCI Class I

The immunity requirements of:

- EN 50082-1
- IEC 801-2 ESD
- IEC 801-3 Radiated susceptibility
- IEC 801-4 EFT

SmartSwitch 9000 Chassis

Dimensions

76.2 H x 48.3 W x 49.3 D centimeters
(30 H x 19 W x 19.4 D inches)

Weight

Unit: 19.96 kilograms (44 pounds)
Shipping: 24.95 kilograms (55 pounds)

Plus Power Box

Dimensions

22.22 H x 48.3 W x 56.52 D centimeters
(8.75 H x 19.0 W x 25.25 D inches)

Weight

Unit: 5.40 kilograms (12 pounds)
Shipping: 6.75 kilograms (15 pounds)